# CERTIFICATE OF ANALYSIS

PRODUCT NAME: GLYKO® 3'-SIALYL-3-FUCOSYLLACTOSE (3'-S, 3-FL)

PRODUCT CODE: GKAD-00116

LOT NUMBER: DP06J2501a

PACK SIZE: 2 x 50 µg (qualitative standard for glycan identification)

PURITY: ≥90% of glycan by HPLC

FORM: Dry solid

STORAGE: Store at -20°C before and after reconstitution

EXPIRATION: May 2016, may be used for 1 year after reconstitution (extended from prior exp. date based on re-assay)

RE-ASSAY DATE: May 2011

STRUCTURE:

$$\text{Fuc } \alpha(1{-}3)$$
$$|$$
$$\text{NeuAc } \alpha(2{-}3) \text{ Gal } \beta(1{-}4) \text{ Glc}$$
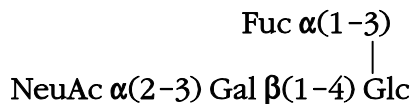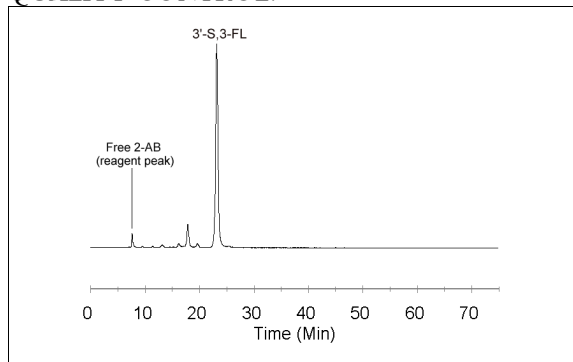
QUALITY CONTROL:

Figure 1 - **HPLC results**: 3'-S, 3-FL labeled according to the Signal™ 2-AB Labeling Kit (GKK-404) and analyzed on a GlycoSep™ N column (GKI-4728) in ammonium formate/acetonitrile.
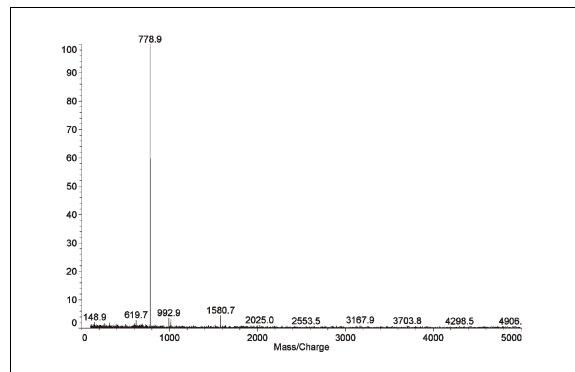

Figure 2 - MALDI-TOF of 3'-S, 3-FL [M + Na]$^{+}$

Rev. AB

Molecular Weight: 779.7 (average)[1]

Structural Analysis: The purity and structural integrity of the glycan is assessed by one or more of the following techniques: HPLC[2], mass spectrometry[3,4], FACE®[5], ^{1}H-NMR[6] and HPAEC-PAD[7].

Applications:

- qualitative standard for various analytical procedures
- radio-labeling, fluorescent-labeling or formation of a variety of oligosaccharide derivatives
- substrate for glycosidase and glycosylltransferase assays
- establishing the specificity of lectins and monoclonal antibodies

Reconstitution: Use HPLC-grade water or an aqueous buffer to dissolve the glycan. Store the reconstituted glycan at -20°C in working aliquots. Avoid multiple freeze/thaw cycles.

Handling: The oligosaccharide is shipped as a dried solid. Allow the unopened vial to reach ambient temperature and tap on a solid surface to ensure that most of the material is at the bottom of the vial. Gently remove the cap, add the desired volume of water or buffer, re-cap and mix thoroughly to redissolve all the oligosaccharide. For maximal recovery, ensure that the cap lining is also rinsed, and centrifuge the reconstituted vial briefly before use.

Make sure that any glassware, plasticware, solvents or reagents which come into contact with the glycan are free of glycosidases and carbohydrate contaminants.

Minimize exposure to elevated temperatures or extremes of pH. High pH will cause epimerization of the reducing terminal GlcNAc.

REFERENCES

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7. Townsend RR, Hardy MR, Hindsgaul O and Lee YC. High-performance anion-exchange chromatography of oligosaccharides using pellicular resins and pulsed amperometric detection. Anal Biochem 1988 Nov 1;174(2):459-70.

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9. Parkkinen J, Finne J. Isolation and structural characterization of five major sialyloligosaccharides and a sialylglycopeptide from normal human urine. Eur J Biochem. 1983 Nov 2;136(2):355-61.

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Authorized Signature